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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,964	09/26/2005	Junbiao Zhang	PU030103	6118
24498	7590	12/18/2009		
Robert D. Shedd, Patent Operations			EXAMINER	
THOMSON Licensing LLC			MITCHELL, NATHAN A	
P.O. Box 5312				
Princeton, NJ 08543-5312			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			12/18/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/550,964

**Applicant(s)**

ZHANG ET AL.

**Examiner**

NATHAN MITCHELL

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 7, 9-11 and 13-19 is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments regarding claim 4 and 5 are persuasive thus prosecution is reopened. Applicant's arguments regarding the access points being "controlled by the gateways" are semi-persuasive so the examiner also takes the opportunity to address that issue in a different way.

If the examiner is to take applicant's dictionary definition given on page 13 of appeal brief, the examiner does not see how the GAN is not a gateway. In order to connect to IP network 90, there is no choice but to go through GAN 100 as that is the only "entrance" available.

Furthermore, the DLR 50 that the Examiner calls a gateway cannot perform those functions. It must be noted that Chang does not refer to the DLR 50, or to any other device, as a gateway. Presumably then, the Examiner asserts that the DLR 50 is disclosed as performing the functions of a gateway. In order to act as a gateway, a device must pass information between two different networks. Chang simply describes the DLR 50 as "functioning like an HLR." *See* Chang, ¶23. Chang's DLR 50 only provides location information — the DLR never operates as a gateway. The fact that neither the GAN nor the DLR performs the functions of a gateway indicates that the combination of the two components similarly fails to disclose or suggest a

The DLR is combined with the GAN as one unit (see paragraph 23). Thus the combined entity passes data.

In order to bolster the rejection, the Examiner cited U.S. Patent No. 7,356,339 to Nam (hereinafter "Nam"). Preliminarily, it must be recognized that Nam has not been cited as a part of any rejection. It is therefore understood that Nam has been introduced to provide general background information regarding the state of the art. However, the mere fact that Nam describes its GAN as a gateway does not in any way imply that the GAN of Chang should be interpreted as such. As noted above, a GAN is defined simply as a "General ATM switch Network," and such a network in general does not imply the use or the functions of a gateway. The fact that the Examiner has found one reference which describes a GAN as a gateway does not indicate that all GANs include or function as gateways — the network described in Nam is directed toward the particular goals of Nam's invention and has little bearing on Chang (and even less bearing on the present invention). Absent any further description, a GAN is simply a type of switched network, without any sort of gateway functionality implied.

The examiner disagrees that Nam provides "general background information regarding the state of the art". The fact is that the Nam patent is from the same assignee and contains the exact same fig. 1 as does Chang. Nam terms a GAN a gateway thus the examiner considers the GAN a gateway.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over 2004/0203771 A1 to Chang et al in view of 2008/0119184 A1 to Rebo et al and 2002/0137518 to Achour

For claim 1, Chang et al. disclose a communication system comprising:

A gateway (50) connected to a wired network (see fig. 1 and paragraph 23)

A plurality of access points associated with and controlled by the gateway (20a/20p)

wherein each access point is configured to wireless communicate with and receive association requests from wireless clients for connection to the wired network through the access point (300) to send session information requests to the gateway in response to received association requests (302) and to process session information setting commands received from gateway (304)

wherein the gateway is configured to maintain session information that exists for each wireless client connected to the wired network through an access point associated with the gateway (302/304 and see abstract) and to respond to a session information request from a given access point by providing that access point with currently existing session information if any maintained by the gateway for the wireless client requesting association with the access point (304).

For claim 1, Chang discloses all the subject matter of the claimed invention except the session information including a session key. In an analogous art, Rebo et al.

disclose session information including a session key being distributed to access points (abstract). It would have been obvious to one of ordinary skill in the art at the time of invention to combine this teaching with the invention as modified by incorporating the security teachings of Rebo but instead distributing the session information through a central gateway (Chang) rather than a distributed manner. The motivation for the combination is the use of a known technique (distribution of session keys) to improve a similar system (wireless communications in the same way (improved security).

Chang as modified isn't completely clear on the gateway controlling the access points. However Chang does disclose a base station manager controlling access points (30), but does not disclose the base station manager is part of the gateway. However in an analogous art Achour does disclose a base station manager in a gateway (70 in 40). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Achour with Chang as modified by putting the BSM in the gateway. The motivation for the combination is a simple substitution of one element (BSM outside) for another (BSM inside gateway) to yield predictable results (Achour shows to implement internal BSM thus combination is predictable).

6. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Rebo as applied to claim 1 and further in view of U.S. Patent Application Publication No. 2002/0041590 A1 to Donovan.

Regarding claims 4 and 5, Chang et al. does not disclose a trusted connection comprising either physical security or encryption between a gateway and access point. However in an analogous art, Donovan discloses securing network connection through

physical security (paragraph 44). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Donovan and Chang as modified by securing the connection between GAN and access points with physical security in order to provide a secure connection.

***Allowable Subject Matter***

4. Claims 6, 7, 9, 10, 11, 13-19 are allowed. Claims 2 and 3 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

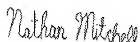
Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN MITCHELL whose telephone number is (571)270-3117. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Nathan Mitchell/  
Examiner, Art Unit 2617  
12/18/2009

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617